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(FILE 'HOME' ENTERED AT 13:30:30 ON 01 FEB 2001)

INDEX 'ADISALERTS, ADISINSIGHT, AGRICOLA, ANABSTR, AQUASCI, BIOBUSINESS, BIOCCommerce, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO, CABA, CANCERLIT, CAPLUS, CEABA-VTB, CEN, CIN, CONFSCI, CROPB, CROPU, DDFB, DDFU, DGENE, DRUGB, DRUGLAUNCH, DRUGMONOG2, DRUGNL, ...' ENTERED AT 13:30:36 ON 01

FEB

2001

SEA WNT(10W) (LIGAND OR BIND?)

5 FILE AQUASCI
48 FILE BIOSIS
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6 FILE BIOTECHDS
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L1 QUE WNT(10W) (LIGAND OR BIND?)

SEA L1 AND SDF

L2 QUE L1 AND SDF

SEA WNT AND SDF

3 FILE CAPLUS
1 FILE ESBIODASE
1 FILE SCISEARCH

L3 QUE WNT AND SDF

FILE 'CAPLUS, ESBIODASE, SCISEARCH' ENTERED AT 13:36:56 ON 01 FEB 2001

L4 5 S WNT AND SDF
L5 4 DUP REM L4 (1 DUPLICATE REMOVED)
L6 36 S L1 AND WNT(25W)SECRET?
L7 18 DUP REM L6 (18 DUPLICATES REMOVED)

L7 ANSWER 9 OF 18 SCISEARCH COPYRIGHT 2001 ISI (R)
 AN 1999:186627 SCISEARCH
 GA The Genuine Article (R) Number: 170NW
 TI Identification of a Frizzled-like cysteine rich domain in the
 extracellular region of developmental receptor tyrosine kinases (vol 7,
 pg 1632, 1998)
 AU Saldanha J; Singh J (Reprint); Mahadevan D
 CS DEPT DRUG DESIGN & EVALUAT, CAMBRIDGE CTR 12, CAMBRIDGE, MA 02142
 (Reprint); NATL INST MED RES, DIV MATH BIOL, LONDON NW7 1AA, ENGLAND;
 BIOGEN INC, CAMBRIDGE CTR 14, CAMBRIDGE, MA 02142; UNIV LONDON BIRKBECK
 COLL, LONDON WC1E 7HX, ENGLAND
 CYA USA; ENGLAND
 SO PROTEIN SCIENCE, (AUG 1998) Vol. 7, No. 8, pp. 1843-&. Publisher: CAMBRIDGE UNIV PRESS, 40 WEST 20TH STREET, NEW YORK, NY 10011-4211. ISSN: 0961-8368.
 DT Errata; Journal
 FS LIFE
 LA English
 REC Reference Count: 19
 ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS
 AB In Drosophila, members of the Frizzled family of tissue-polarity genes encode proteins that appear to function as cell-surface receptors for Wnts. The Frizzled genes belong to the seven transmembrane class of receptors (7TMR) and have on their extracellular region a cysteine-rich domain that has been implicated as the **Wnt binding** domain. This region has a characteristic spacing of ten cysteines, which has also been identified in FrzB (a **secreted** antagonist of Wnt signaling) and Smoothened (another 7TMR, which is involved in the hedgehog signalling pathway). We have identified, using BLAST, sequence similarity between the cysteine-rich domain of Frizzled and several receptor tyrosine kinases. which have roles in development. These include the muscle-specific receptor tyrosine kinase (MuSK), the neuronal specific kinase (NSK2), and ROR1 and ROR2. At present, the ligands for these developmental tyrosine kinases are unknown. Our results suggest that **Wnt**-like ligands may **bind** to these developmental tyrosine kinases.
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L7 ANSWER 12 OF 18 Elsevier BIOBASE COPYRIGHT 2001 Elsevier Science B.V.
DUPLICATE

AN 1998276141 ESBIOBASE

TI sFRP-2 is a target of the Wnt-4 signaling pathway in the developing
metanephric kidney

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SO Developmental Dynamics, (1998), 213/4 (440-451), 38 reference(s)

CODEN: DEDYEI ISSN: 1058-8388

DT Journal; Article

CY United States

LA English

SL English

AB Members of the **Wnt** family of **secreted** glycoproteins
act as short-range signaling molecules in vertebrate embryogenesis.
Previous work has shown that Wnt-4 is required for kidney development.
Mice lacking functional Wnt-4 fail to form pretubular cell aggregates.

Wnt-4 acts as an autoinducer of the mesenchymal to epithelial
transition underlying nephron development. We have identified a member
of the gene family encoding **secreted** frizzled related proteins
(sFRP), putative Wnt antagonists, that shows overlapping expression with
Wnt-4 in aggregating mesenchyme and simple epithelial bodies during
metanephric development. sFRP-2 expression is absent in metanephric
mesenchyme of kidneys mutant for Wnt-4 and is coinduced with Wnt-4 in
isolated metanephric mesenchyme by cells expressing **Wnt-4**. The
cysteine-rich domain of sFRP-2 **binds** to Wnt-4 as shown by
coimmunoprecipitation experiments. Hence, sFRP-2 is a target of the

Wnt-4
signaling pathway in the metanephric kidney and may modulate Wnt-4
signaling. sFRP-2 expression is highly dynamic and specific during other
aspects of embryogenesis. sFRP-2 is expressed in subpopulations of
ependymal cells in spinal cord and brain, in the developing eye, in limb
bud mesenchyme, in the heart, and strongly in skeletogenic condensations
of facial bones, suggesting widespread interaction with other members of
the Wnt gene family during embryogenesis.

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-4. The cysteine-rich domain of sFRP-2 **binds** to Wnt-4 as shown
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Wnt-4 signaling pathway in the metanephric. . .